

What is claimed is:

1. A resin composition for a separator of a fuel cell, which comprises an electroconductive agent and a radical-polymerizable thermosetting resin system.

5 2. A resin composition according to Claim 1, wherein the radical-polymerizable thermosetting resin system comprises at least a radical-polymerizable resin.

3. A resin composition according to Claim 1, wherein the radical-polymerizable thermosetting resin system comprises a radical-polymerizable resin and a
10 radical-polymerizable diluent.

4. A resin composition according to Claim 2, wherein the radical-polymerizable resin comprises a vinyl ester-series resin.

15 5. A resin composition according to Claim 2, wherein the radical-polymerizable resin comprises a vinyl ester-series resin in which (meth)acrylic acid is added to a bisphenol-type epoxy resin.

6. A resin composition according to Claim 2,
20 wherein the double bond equivalent of the radical-polymerizable resin is 200 to 1,000.

7. A resin composition according to Claim 1, wherein the hardened radical-polymerizable thermosetting resin system has a glass transition temperature of 120
25 °C or more.

8. A resin composition according to Claim 3, wherein the radical-polymerizable diluent comprises at

09950081-091201
T02T60-T8005660

least an aromatic vinyl compound.

9. A resin composition according to Claim 1, wherein the weight ratio of the electroconductive agent to the radical-polymerizable thermosetting resin system is 55/45 to 95/5.

10. A resin composition according to Claim 1, wherein the electroconductive agent comprises a carbon powder.

11. A resin composition according to Claim 1, which comprises a carbon powder, a radical-polymerizable vinyl ester-series resin having a plurality of α , β -ethylenically unsaturated double bonds, and a monomer having α , β -ethylenically unsaturated double bond, wherein the weight ratio of the vinyl ester-series resin to the monomer is 100/0 to 20/80, and the weight ratio of the carbon powder to the total amount of the vinyl ester-series resin and the monomer is 55/45 to 95/5.

12. A resin composition according to Claim 1, which comprises a carbon powder, a vinyl ester-series resin formed by adding a (meth)acrylic acid to a bisphenol-type epoxy resin and a radical-polymerizable diluent comprising at least a styrene, wherein the double bond equivalent of the vinyl ester-series resin is 200 to 800.

13. A resin composition according to Claim 1, which further comprises a low-profile agent.

14. A resin composition according to Claim 13, wherein the low-profile agent comprises at least one

09950081-091201

member selected from the group consisting of a styrenic thermoplastic elastomer, a saturated polyester-series resin, and a vinyl acetate-series polymer.

15. A resin composition according to Claim 13,
5 wherein the amount of the low-profile agent is 0.1 to 30 parts by weight relative to 100 parts by weight of the radical-polymerizable thermosetting resin system.

16. A separator for a solid polymer-type fuel cell formed with the resin composition recited in Claim 1.

- 10 ~~17. A process for producing the separator recited in Claim 16 which comprises molding the resin composition recited in Claim 1 by a resin molding method.~~

- 15 ~~18. A process according to Claim 17, which comprising kneading the resin composition recited in Claim 1 with a pressure kneader and molding the kneaded one.~~

19. A process according to Claim 18, wherein the pressure in the pressure kneader is 0.1×10^5 to 10×10^5 Pa.

- 20 20. Use of a resin composition for a separator of a fuel cell, wherein the resin composition comprises an electroconductive agent and a radical-polymerizable thermosetting resin system.